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RAW SEQUENCE LISTING

DATE: 09/20/2004

PATENT APPLICATION: US/10/796,304

TIME: 16:06:10

Input Set : A:\US Utility 050229-0429 Sequence Listing.txt

Output Set: N:\CRF4\09202004\J796304.raw

3 <110> APPLICANT: University of Kentucky Research Foundation
 4 Rohr, Jorgen
 6 <120> TITLE OF INVENTION: Derivatives of Mithramycin and Methods of Making and Uses
 Thereof
 8 <130> FILE REFERENCE: 050229-0429
 10 <140> CURRENT APPLICATION NUMBER: 10/796,304
 11 <141> CURRENT FILING DATE: 2004-03-10
 13 <150> PRIOR APPLICATION NUMBER: 60/548,175
 14 <151> PRIOR FILING DATE: 2004-03-01
 16 <160> NUMBER OF SEQ ID NOS: 1
 18 <170> SOFTWARE: PatentIn version 3.2
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 5975
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Streptomyces argillaceus
 25 <400> SEQUENCE: 1

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30	aggaacctgg	gccgctgttc	gggggggaga	tgagcgtggt	cgtcggggac	gcactggacg	180
32	gtcggggcca	gctcgatgag	gtcgacgtag	cccggttccg	ggtgggcgcg	cgccaggacg	240
34	tggaggacgc	cgctgatccg	cttgccagg	aacgccacca	ccccggtgcc	gcgcgggctg	300
36	agcagcggct	gggtccaccc	cttgacttcg	cggttgcccg	cctccacaga	cacggcgacg	360
38	atcgcgaaat	gccgtccact	ggtgtggcgt	atctcgtccg	tgtcgcggac	ccagccgtcc	420
40	acggaggtca	gcgggacgag	ctgcgcggcg	acctcgtcgc	gcgccctgag	cccgttgaac	480
42	cagcgcagca	gctcgggcag	ggtgtgcgcg	gcgggggcct	gcgcggacag	ggaggcggtc	540
44	agggcggcca	cggccgcccc	gcgggaaccg	tcggtcgtga	ctccctcgag	ggaaccgtcc	600
46	ggcggggcga	cggggaggca	ggccaggacc	gtccgagtgt	ccatgttgac	caggtccggg	660
48	acgccgagca	gccggcggac	ctgaccgagg	gtcagccagc	ggtagtcctc	gtgctcgggc	720
50	acgtcgccga	cggcctcgac	gacgagattg	cggttgcgtt	tgcggaagaa	ccaggaaccg	780
52	tgtcggact	ggagcacgtc	gaccagcggc	cggcccttgc	cgggggtccgt	gaagtactcc	840
54	aggtaccgca	cggcgctgcc	ctcgtgcaac	cccgtgtagt	tgtcgcgggt	ggcctgcacc	900
56	gtgggcgaca	actggagtcc	ctcggcggtt	ccgggctcgg	ccttcgcctg	catcaggcag	960
58	tgcaggacac	cgctgaactc	cttgaccagg	atgccgagga	aaccacttc	cggctggtgc	1020
60	atgatcggct	gggaccagga	gacgggggtc	gggccctcgg	agcagagccc	cagcccttcg	1080
62	acggtgaaga	agcggccgct	gtcgtgcgcc	agattcccgg	tgaccgggtg	gaagccccag	1140
64	cgctggagct	cggcgaaggg	gatgcgcctc	acgtccatcc	ggatggcctt	gcggcgctcc	1200
66	tccaagcagt	cgtggacacc	accaggggac	agcagtcgcg	tgtcggccgc	cgccgattcg	1260
68	gcgatgcgcc	tcagatccgg	cgcgtcgagg	ccgtccgggg	ggaccgctgg	atgctttctg	1320
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72	ccaccgtcgg	caccaggtct	ggagtgcgcg	tcagggcccg	gtcggtcggg	accgggcgga	1440
74	cggcgggttc	gtcagggctc	gagccgcctt	cgatcagggc	ggccgaacgt	ggtcgcctgt	1500
76	gagttccgaa	gccttgcccg	aagtggcctt	tcagtgaagt	agatcgtgta	cggcaacctg	1560
78	ctgtaccgcg	aggacgacac	ccccgacgag	gtggttctct	cctcgatcag	agcggccctt	1620
80	gacgcggggg	tgacgacctt	cgacaccgcg	gacgtctacg	gcattgttcc	ctccgagagc	1680

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82	ctgctgggccc	gggcactggc	cggcacgccc	cgcaagagc	tggctgctgtg	caccaagggtg	1740
84	gggatgccga	cggggttcgg	gcccacgga	cgggggctgt	cgaggaaaca	cgtcatggag	1800
86	tccgtcgacg	gctcgctgcg	ccgtctgcgc	gtcgaccaca	tcgacgtcta	caccgcgcac	1860
88	cgctacgacc	cggcgactcc	gctggaggag	ctgatgtgga	ccttctccga	cctgggtacgg	1920
90	gccgggaaga	tcctctacgt	cggcatgtcg	gaatggccc	tggagcggat	cgccgagggcg	1980
92	gccgggatag	gtgcgcggct	cggtgtgccg	gtgatctgtc	acatgccccg	ctactcgatg	2040
94	ctgtggcggg	cgccggaggc	cgaggtgatc	cccgcctgcc	gtgacctggg	catcggccag	2100
96	atcgggagct	cgaattcgaa	gcttctgcag	ctcacggtaa	ctgatgccgt	atttgcahta	2160
98	ccagcgtacg	gcccacagaa	tgatgtcacg	ctgaaaatgc	cggcctttga	atgggttcat	2220
100	gtgcagctcc	atcagcaaaa	ggggatgata	agtttatcac	caccgactat	ttgcaacagt	2280
102	gccgttgatc	gtgctatgat	cgactgatgt	catcagcggg	ggagtgcaat	gtcgtgcaat	2340
104	acgaatggcg	aaaagccgag	ctcatcggtc	agcttctcaa	ccttgggggt	acccccggcg	2400
106	gtgtgctgct	ggteccacagc	tccttccgta	gcgtccggcc	cctcgaagat	gggccacttg	2460
108	gactgatcga	ggccctgcgt	gctgcgctgg	gtccggagg	gacgctcgtc	atgccctcgt	2520
110	ggtcagggtc	ggacgacgag	ccgttcgatc	tgccacgctc	gcccgttaca	ccggaccttg	2580
112	gagttgtctc	tgacacattc	tggcgctgc	caaatgtaaa	gcgcagcgcc	catccatttg	2640
114	cctttgcccgc	agcggggcca	caggcagagc	agatcatctc	tgatccattg	ccccgccac	2700
116	ctcactcgcc	tgcaagccc	gtcgcccgtg	tccatgaact	cgatgggcag	gtacttctcc	2760
118	tcggcgctggg	acacgatgcc	aacacgacgc	tgcactctgc	cgagttgatg	gcaaagggttc	2820
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122	atctcgagaa	tgaccactgc	tgtgagcgct	ttgccttggc	ggacaggtgg	ctcaaggaga	2940
124	agagccttca	gaaggaaggt	ccagtcggtc	atgcctttgc	tcggttgatc	cgctcccgcg	3000
126	acattgtggc	gacagccctg	ggtcaactgg	gccgagatcc	gttgatcttc	ctgcatccgc	3060
128	cagaggcgcg	gatgcgaaga	atgcgatgcc	gctcgccagt	cgattggctg	agctcatgag	3120
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138	gcgacgtctg	tcgagaagtt	tctgatcgaa	aagttcgaca	gcgtctccga	cctgatgcag	3420
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142	ctgcgggtaa	atagctgcgc	cgatgggttc	tacaaagatc	gttatgttta	tcggcacttt	3540
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156	ggcgtccgtc	tggagacgga	cctgctggtg	aggatcgacg	aggtcctggg	cgactccgtc	3960
158	gtgcacgacg	aggagtagcc	cccggggcgg	gccggtggag	gcggatgcga	cgccgttcgt	4020
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174	ccttgccctcc	ctgtccaacg	accgcagccg	ggccgcctgg	cacgttcagg	accgctggcc	4500
176	cgacgactgg	cccgtccgtc	cggaactcct	cgacgacgag	cagttcgcgc	tgatcgagaa	4560
178	cctgggacgg	atcgacagcg	tcatggcctc	ggccatgctc	gacgacctgc	tgagcttcgc	4620

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184	catcgagctg	cgccgcatgg	gcggcggaacc	gctgccggag	tacgtccggc	tgtacgagcg	4800
186	ggcgggaacg	acggtgcgga	ccgagcccag	tgcctggatc	gaccccagtg	cccccgcat	4860
188	ccggtacccg	gccggaccga	cctgccgtca	gatgcggtac	gtgccctaca	acggcccggg	4920
190	cctgctgccg	gactggctgc	gccgggaacc	gtcgggcagc	cgggctctgcg	tcacgtgggg	4980
192	cgccacctcc	atggccctgc	gcggcggcac	cgctcgtcgaa	ctcgtacgcc	agtgcgtgga	5040
194	agccgccgcc	gaggtggccg	acgaggtcgt	cgctcgcggtg	accgaacaga	ccgcgcgggc	5100
196	gctggaggac	acgcgcgtgc	cggaccacgc	acgcgtcgcg	gtcggattgc	cgctgcacct	5160
198	gctgggtgccg	tctgcgacc	tcgtggtcca	ccacggtggc	gccggcacca	gcatgaccgc	5220
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206	cggcgccgcc	gcgcggcggc	tggccgacgg	catccgcacc	cagcccgcac	cgcccgacgt	5460
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212	cacgtccccg	tggcccaccc	attacttcgt	cgtccagccg	ctggccgccc	cgttccgcgc	5640
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220	cggtcaggtc	ttcgacacct	ggcagcaggc	cacctcgcc	aacctcgacc	cggtcatgga	5880
222	cctcgccccg	acctggaaac	cggacctggt	gctcgccgac	accatgtgcc	cgccgggcct	5940
224	cgtcgccgca	caggaaactcg	gcgtgccggg	gatcc			5975

VERIFICATION SUMMARY

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